Please amend Claim 6, line 29 by deleting "2, for example" and substituting--a derived compensation multiplier--therefore.

Please amend Claims 7, line 2, by deleting "a cooking appliance including".

REMARKS

Claims 1-7 will be pending after entry of the proceeding amendment with none having been allowed. Claims 1-7 are independent claims and all have been amended to more clearly point out the patentable aspects of the invention.

Rejection Under 35 U.S.C. 112

In paragraphs 1 and 2 of the Official Action, the Examiner rejected Claims 1-7 as being unclear. Claims 1-7 have been amended to eliminate any ambiguity that may have existed in these claims.

Rejection Under 35 U.S.C. 102

In paragraphs 3 and 4 of the Official Action, the Examiner rejected Claims 1, 3, and 7 of the present application on the basis that these claims are anticipated by U.S. Patent 5,186,097 (*Vaseloff*). Applicant agrees with the Examiner that *Vaseloff* teaches a cooking appliance that includes a fry pot, a heating device, a temperature sensor, a control panel and a computerized controller, which adjusts the heating device according to a programmed algorithm. While the present invention includes these structural elements, for the reasons presented below, the Applicant respectfully submits the present invention is by no means anticipated by *Vaseloff*.

Vaseloff teaches distinguishing between batch sizes, without regard for the type of product in the fry pot, and modifying the cooking profile accordingly. In other words, *Vaseloff* teaches a "curve following" program. It does this by capturing the rate of oil

temperature change when a new batch of product is introduced into the oil, and uses that rate of change to distinguish batch size. Thereafter, the *Vaseloff* device assigns a corresponding, predetermined energy curve for the controller to follow.

The present invention also uses oil temperature information, but for very different reasons. In the present invention a programmable ramp threshold distinguishes when an oil stir has occurred to remove the temperature offset for oil stratification. A programmable ramp threshold also determines if a food product has been introduced into the cooking medium to mark the physical start of the cooking process and to base the start of the timing function.

Vaseloff also differs from the present invention by teaching a methodology to minimize temperature overshoot during heating and cooling cycles is to dynamically learn the temperature response to heater inputs and adjust future heating inputs accordingly. Unlike *Vaseloff*, the present invention teaches a diagnostic for heating capacity between oil temperatures by capturing the maximum heat rise per second. This measure is more immune to normally occurring events such as adding oil or stirring during a measurement interval.

With regard to the present invention, Claim 1 as amended includes a means for compensating for the introduction of a new cooking medium by adjusting the sensed temperature of the new cooking medium by a predetermined and programmable amount over a select number of cooking cycles. This function, which also serves to counteract the effects of new cooking medium added to the existing cooking medium, distinguishes Claim 1 from the prior art references.

Claim 3 as amended includes a means for compensating by detecting a drop in temperature of the cooking medium and initiating a cook cycle based upon this detection. This function, which also determines the start time of the cook cycle based on the introduction of product rather than the actualization of a start button by an operator and modifies the timing frequency to the correct total cook time, distinguishes Claim 3 from the prior art references.

Claim 7 as amended includes a means for conducting cooking appliance performance checks through manipulation and display of information that has been received and stored by the controller. This element, which also provides extensive diagnostic functions, distinguishes Claims 7 from the prior art references.

In paragraphs 3 and 5 of the Official Action, the Examiner rejects Claim 2 of the present application on the basis that this claim is anticipated by U.S. patent 5,847,365 (*Harter*). Applicant agrees with the Examiner that *Harter* teaches a cooking appliance that includes a fryer, a temperature sensor, and a control system which compensates for oil stratification. While the present invention includes these structural elements, for the reasons presented below the Applicant respectfully submits the present invention is by no means anticipated by *Harter*.

Harter addresses the problem of oil stratification by storing an array of cooking times as a function of idle time. Basically, through experimentation a user determines and amasses the amount of cook time required after each certain amount of idle time and inputs that into the *Harter* device. Thereafter, the controller tracts idle time and when a cook cycle is initiated, the appropriate cook time is found in the memory array and used to control the cook cycle. In other words, the device taught in *Harter* can eventually be programmed to track the idle cycle and then select a predetermined cook time correction to compensate for the cooled oil. Unlike the reactive approach of *Harter*, the present invention is proactive. To prevent oil stratification, the present invention incorporates a programmable function that offsets the set temperature at a defined rate to maintain a near consistent average oil temperature.

With regard to the present invention, Claim 2 as amended includes a means for compensating for oil stratification. This function, which also offsets the set temperature by a defined rate for a defined period of time, distinguishes Claim 2 from the prior art references.

Rejection Under 35 U.S.C. 103

In paragraphs 6 and 7 of the Official Action, the Examiner rejects Claims 4-6 of the present invention on the basis that these claims are obvious in light of U.S. Patent 6,018,150 (*Maher*). Applicant agrees that *Maher* teaches an appliance that includes a vat, a burner, a temperature sensor, a controller with means to adjust the cook cycle according to a non-linear compensation, and a method of using the appliance to cook a food product. The Applicant respectfully disagrees that *Maher* renders the present invention obvious because all *Maher* teaches is a control strategy to reduce temperature overshoot by non-linear means. That is, *Maher* attempts to maintain the fryer temperature within a tight band around the set point through control of the equipment without consideration of the product being cooked.

Unlike *Maher*, the non-linear compensation of the present invention stretches or compresses cook time increments based on how a cooking medium at various temperatures affects a specific product. The algorithm of the present invention is adjusted so that the time expansion/compression at any given point results in an equivalent amount of product cooked during that time interval. In other words, the present invention correlates time to the product being cooked independent of temperature control. One purpose of this compensation function is to cook a product regardless of the actual medium temperature provided by the cooking device as the performance of a cooking device varies over time, is adversely dependent on maintenance and is affected by other factors.

With regard to the present invention, Claim 4 as amended includes a means for adjusting the duration of a cook cycle according to a compensation algorithm that assigns a fixed multiplier to the product being cooked. This function, which also considers the performance properties of the product and compensates for erratic equipment performance to produce a consistently cooked product, distinguishes Claim 4 from the prior art references. Similarly, Claims 5 and 6 as amended are distinguished from the prior art as both include this compensation algorithm which also considers the performance properties of the product and compensates for erratic equipment performance to provide a method for cooking a food item
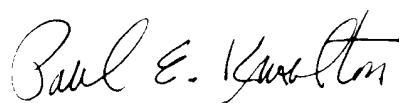
and a cooked food item, respectively.

In view of the foregoing Applicant respectfully submits that the pending claims as amended, and in light of the above, are patentable over the cited references. The preceding is based only on the arguments presented in the Official Action, and therefore do not address patentable aspects of the invention that were not addressed by the Examiner in the Official Action. The claims may include other elements that are not shown, taught, or suggested by the cited art. Accordingly, the preceding argument in favor of patentability is advanced without prejudice to other basis of patentability.

CONCLUSION

The foregoing is submitted as a full and complete response to the Official Action mailed June 15, 2000. Applicant respectfully submits that Claims 1-7 as amended recite apparatus, a method, and product not taught or suggested in the prior art. That is, Applicant respectfully submits that Claims 1-7 as amended are allowance, and that the present application is in condition for allowance. If, for some reason Examiner Becker believes otherwise, a phone call to the below signed to quickly resolve any outstanding issues is respectfully requested.

Respectfully submitted,

KILPATRICK STOCKTON, LLP

By: Paul E. Knowlton
Reg. No. 44,842

KILPATRICK STOCKTON, LLP
2400 Monarch Tower
3424 Peachtree Road, N.E.
Atlanta, Georgia 30326
(404) 949-2400
Our Docket: 42655-214299 (03755-0100)